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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,773	12/12/2003	Gregory Alan Flurry	AUS920030811US1	1897
34533 7590 01/15/2008 INTERNATIONAL CORP (BLF) c/o BIGGERS & OHANIAN, LLP P.O. BOX 1469 AUSTIN, TX 78767-1469			EXAMINER NOORISTANY, SULAIMAN	
			ART UNIT 2146	PAPER NUMBER
			MAIL DATE 01/15/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/734,773	FLURRY ET AL.	
	Examiner	Art Unit	
	Sulaiman Nooristany	2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/12/2003 & 06/20/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

Detailed Action

This Office Action is response to the application filed on 12 December 2003

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English.

Claims 1-6, 10-16, 20-26 & 30 are rejected under 35 U.S.C. 102(e) as being anticipated by **Sharma et al.** U.S. Patent Application No. **US 2003/0204645**.

Regarding claims 1, 11 & 21, Sharma teaches method of port type agnostic proxy support for web services intermediaries, the method comprising:

receiving in a web services intermediary (**inherent as dynamic proxy within client & server; HTTP**) a request for execution of a web services operation (**The client may generate a call request to invoke one or more methods on the defined service endpoint based on the information contained in the imported WSDL document. The call request may be received by a runtime system (client/server**

proxy) that instantiates and initializes a service endpoint object associated with the defined service endpoint -- [0028]),

wherein the request includes parametric information (**port Type**) from which an endpoint for a target service that supports the operation can be identified (**The wsdl:binding element binds an abstract wsdl.portType to a specific protocol and transport that may be used by client to communicate with server over network "i.e. another web services intermediary or proxy" – [0054])**

identifying, by the web services intermediary (**dynamic proxy**) in dependence upon the parametric data, the endpoint for a target service that supports the operation (**an Endpoint (terminal) Interface parameter associated with the method which identify the service endpoint (terminal) interface that is supported by the created dynamic proxy [0056];**

creating, by the web services intermediary a target service request for execution of the operation on the target service (**For a client side proxy, client utilizes a dynamic proxy class that supports a service endpoint interface dynamically at runtime without requiring code generation of a stub class that implements a specific service endpoint interface. The creation of a dynamic proxy may be supported by the getPort method A serviceEndpointInterface parameter associated with this method may specify the service endpoint interface that is supported by the created dynamic proxy -- [0056]; A portName parameter in the createCall method identify the service endpoint targeted by client -- [0057]); and**

issuing, by the web services intermediary the target service request to the target

service (the runtime system may invoke one or more methods associated with the call request on the service endpoint object and receive result data based on the invocation. The result data may be configured in a response message that is provided to the client using the same protocol and transport binding the call request was configured – [0028]).

Regarding claim 2, Sharma taught the method of claim 1, as described above.

Sharma further teaches wherein “the target service request as created and issued to the target service bears unexamined and unmodified message contents of the request received in the web services intermediary” **(Fig. 1 utilizes a dynamic proxy class that supports a service endpoint interface dynamically at runtime without requiring code generation of a stub class that implements a specific service endpoint interface [0056])**.

Regarding claim 3, Sharma taught the method of claim 1, as described above.

Sharma further teaches wherein “identifying to a requester an endpoint of the web services intermediary as an endpoint that supports the operation” **(an Endpoint (terminal) Interface parameter associated with the method which identify the service endpoint (terminal) interface that is supported by the created dynamic proxy [0056])**.

Regarding claim 4, Sharma taught the method of claim 1, as described above. Sharma further teaches wherein “the parametric information includes a port type for the operation” (a **portName** parameter include the name of a specific operation of a port type for the target service endpoint [0057]).

Regarding claim 5, Sharma taught the method of claim 1, as described above.

Sharma further taught wherein “identifying, in dependence upon the parametric information, the endpoint for a target service that supports the operation further comprises” [see above rejections]

“identifying, in dependence upon the parametric information, a multiplicity of endpoints (**plurality of service endpoints [0065]**) of target services that support the operation ” and

“selecting one endpoint from the multiplicity of endpoints in accordance with selection rules” (an **Endpoint (terminal) Interface** parameter associated with the method which identify the service endpoint (terminal) interface that is supported by the created dynamic proxy [0056]).

Regarding claim 6, Sharma taught the method of claim 5, as described above.

Sharma further teaches wherein “the parametric information includes a port type for the operation, and identifying, in dependence upon the parametric information, a multiplicity of endpoints of target services that support the operation comprises [See above rejection]

“identifying from a registry, in dependence upon the port type, a multiplicity of target services for the port type” **(an inquiry API for locating candidate services from a UDDI registry [0112]).**

Regarding claim 10, Sharma taught the method of claim 1, as described above.

Sharma further teaches wherein, “receiving in the intermediary a response from the target service **(Fig. 1, unit 110 -- server response to the Network unit -- 120);**

creating in the intermediary, in dependence upon the response from the target service, a response from the intermediary **(The wsdl:binding element binds an abstract wsdl.portType to a specific protocol and transport that is used by client to communicate with server over network [0054]),** and

returning the response from the intermediary to the requesting client **(The result data may be configured in a response message that is provided to the client using the same protocol and transport binding the call request was configured – [0028]).**

Claims 12 and 22 have the similar limitation as of claim 2; therefore, they’re rejected under the same rationale as in claim 2.

Claims 13 and 23 have the similar limitation as of claim 3; therefore, they’re rejected under the same rationale as in claim 3.

Claims 14 and 24 have the similar limitation as of claim 4; therefore, they're rejected under the same rationale as in claim 4.

Claims 15 and 25 have the similar limitation as of claim 5; therefore, they're rejected under the same rationale as in claim 5.

Claims 16 and 26 have the similar limitation as of claim 6; therefore, they're rejected under the same rationale as in claim 6.

Claims 20 and 30 have the similar limitation as of claim 10; therefore, they're rejected under the same rationale as in claim 10.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-9, 17-19 & 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sharma** U.S. Patent Application Publication No. US 2003/02044645, in view of **Brittenham** U.S. Patent Application No. US 2002/0178214.

Regarding claim 7, Sharma teaches wherein selecting one endpoint from the multiplicity of endpoints [**plurality of service endpoints [0065]**]

Sharma further teaches wherein selecting one endpoint from the multiplicity of endpoints in accordance with selection rules [**an Endpoint (terminal) Interface parameter associated with the method which identify the service endpoint (terminal) interface that is supported by the created dynamic proxy [0056]**].

With respect to claim 7, Sharma teaches the invention set forth above except for the claimed “load balancing among target services”.

Brittenham teaches that it is well known to utilize load balancing among target services (A process is defined whereby conditions such as usage metrics for incoming client requests (or other network conditions such as load balancing considerations) are monitored, and used to trigger dynamic undeployment of web services from locations in the network -- Abstract, lines 4-9)).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sharma's invention by utilizing “load balancing among target services” wherein workload balancing improves the performance of a Web site by dynamically adjusting the amount of work sent to each server in a clustered group of servers. In addition, use of "edge servers" in a network configuration provides increased network efficiency and availability by caching static application components (such as images, forms, etc.) near the edge of the network, where they can be quickly returned to a requester (or quickly retrieved by presentation logic for use in assembling a response to be delivered to a

requester). An edge server is a server which is physically located at or near the edge of a network. Edge servers may perform workload balancing, and are sometimes referred to as distributed web caches, surrogates, and/or proxies (as taught by Brittenham).

Regarding claim 8, Sharma and Brittenham together taught the set-forth of the present claim.

“creating a target service request for execution of the operation on the target service comprises: (a service endpoint (terminal) defined by server that client targets for access [0054]) as taught by Sharma.

However, Brittenham further teaches composing the request in a data structure useful in a binding-neutral interface; and calling the binding-neutral interface, passing the request as a call parameter (dynamically binding the requester to a located service using service information which is conveyed in a platform-neutral WSDL format using SOAP/XML Protocol and HTTP messages” [0007]).

Regarding claim 9, Sharma and Brittenham together taught the method of the claim wherein “issuing the target service request to the target service comprises [See above rejection].

Brittenham further teaches “calling one or more member methods in a binding-neutral interface” (dynamically binding the requester to a located service using service information which is conveyed in a platform-neutral WSDL format using

SOAP/XML Protocol and HTTP messages [0007]).

Claims 17 & 27 have the similar limitation as of claim 7; therefore, they're rejected under the same rationale as in claim 7.

Claims 18 & 28 have the similar limitation as of claim 8; therefore, they're rejected under the same rationale as in claim 8.

Claims 19 & 29 have the similar limitation as of claim 9; therefore, they're rejected under the same rationale as in claim 9.

Response to Arguments

Applicant's arguments filed on 12/03/2007 have been fully considered but they are not persuasive. With respect to applicant's arguments Sharma does disclose each & every element of the claims of the present application. In response to claim 1, Sharma discloses wherein a method of port type agnostic proxy support for web services intermediaries, Please see above rejections.

In response to applicant's arguments, *"Receiving In A Web Services Intermediary A Request For Execution Of A Web Services Operation, Wherein The Request Includes Parametric Information From Which An Endpoint For A Target Service That Supports The Operation Can Be Identified."* Sharma does disclose receiving in a web services intermediary is inherent as dynamic proxy within client & server and it establishes communication through HTTP which means receive and response. A proxy server can be placed in the user's local computer or at specific key points between the user and the destination servers or the Internet. The client may generate a call request to invoke one or more methods on the defined service endpoint based on the information contained in the imported WSDL document. The call request may be received by a runtime system (client/server proxy) that instantiates and initializes a service endpoint object associated with the defined service endpoint -- [0028]), wherein the request includes parametric information (port Type) from which an endpoint for a target service that supports the operation can be identified (The wsdl:binding element binds an abstract wsdl.portType to a specific protocol and transport that may be used by client to communicate with

server over network "i.e. another web services intermediary or proxy" – [0054]). In addition Sharma discloses a client side proxy and server side proxy (which are inherent and acting as web server intermediary), for example client may utilize a dynamic proxy class that supports a service endpoint interface dynamically at runtime without requiring code generation of a stub class that implements a specific service endpoint interface.

The creation of a dynamic proxy may be supported by the getPort method defined in the javax.xml.rpc.Service interface. A serviceEndpointInterface parameter (*The name of the service endpoint interface may be mapped from the name attribute of the wsdl:portType element, which may be a unique name among all of the port types defined in the WSDL document. If the mapping tool uses elements of the wsdl:binding to map the service definition, then the name of the service endpoint interface maybe mapped from the name of the wsdl:binding element. Also, the wsdl.port element included in the WSDL document may specify an address for a service endpoint (which may be defined and maintained by server 110 or another server connected to network 120) based on the specified protocol binding identified in the wsdl:binding element – [0069]*) associated with this method may specify the service endpoint interface that is supported by the created dynamic proxy. The dynamic proxy may be used by client to invoke an operation

In response to applicant's argument, "web services component that lies between a web services client and a web services provider." Sharma further discloses HTTP session and SOAP message which is inherent as receiving/sending a request through a web services intermediary where as HTTP is a request/response protocol between a

to a specific protocol and transport that may be used by client to communicate with server over network "i.e. another web services intermediary or proxy" – [0054]). In addition Sharma discloses a client side proxy and server side proxy (which are inherent and acting as web server intermediary), for example client may utilize a dynamic proxy class that supports a service endpoint interface dynamically at runtime without requiring code generation of a stub class that implements a specific service endpoint interface. The creation of a dynamic proxy may be supported by the getPort method defined in the javax.xml.rpc.Service interface. A serviceEndpointInterface parameter (*The name of the service endpoint interface may be mapped from the name attribute of the wsdl:portType element, which may be a unique name among all of the port types defined in the WSDL document. If the mapping tool uses elements of the wsdl:binding to map the service definition, then the name of the service endpoint interface maybe mapped from the name of the wsdl:binding element. Also, the wsdl:port element included in the WSDL document may specify an address for a service endpoint (which may be defined and maintained by server 110 or another server connected to network 120) based on the specified protocol binding identified in the wsdl:binding element – [0069]*) associated with this method may specify the service endpoint interface that is supported by the created dynamic proxy. The dynamic proxy may be used by client to invoke an operation

In response to applicant's argument, "web services component that lies between a web services client and a web services provider." Sharma further discloses HTTP session and SOAP message which is inherent as receiving/sending a request through a

web services intermediary where as HTTP is a request/response protocol between a client and a server. The client making an HTTP request such as a web browser, or other end-user tool is referred to as the user agent. The responding server which stores or creates resources such as HTML files and images is called the origin server. In between the user agent and origin server may be several intermediaries, such as proxies, gateways, for example (Fig. 1, unit 120 -- Network).

Conclusion

Applicant's arguments filed on 12/03/2007 have been fully considered but they are not persuasive. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sulaiman Nooristany whose telephone number is (571) 270-1929. The examiner can normally be reached on M-F from 9 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu, can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sulaiman Nooristany 09/24/2007



JEFFREY PWU
SUPERVISORY PATENT EXAMINER